

## State of Washington **Department of Fish and Wildlife**

P.O. Box 1100, 111 Sherman St. (physical address), La Conner, Washington 98257-9612

1/17/2013

Gateway Pacific EIS, c/o CH2M HILL 1100 112<sup>th</sup> Avenue NE Suite 400 Bellevue, WA 98004

SUBJECT: WDFW Scoping Comments – Gateway Pacific Terminal/Custer Spur Environmental Impact Statement

Dear CH2M HILL,

The Washington State Department of Fish and Wildlife provide the following EIS scoping comments for your consideration.

### WDFW'S REGULATORY AUTHORITY

Chapter RCW 77.55.021 Hydraulic Code

Chapter WAC 220-110 Hydraulic Code Rules

Chapter RCW 77.120 Ballast Water

**Chapter WAC 220-150 Ballast Water Rules** 

# GATEWAY PACIFIC TERMINAL UPLAND FACILITY

### **UPLAND FACILITY DESIGN**

### 1. Streams

**Impact Statement** 

WDFW is concerned that the proposed upland facility will impact the existing riparian corridors, stream habitat, and stream hydrology at the project site.

#### Studies Needed

- a. Hydraulic analysis of existing streams.
- b. Baseline estimate of existing stream habitat and functions.
- c. Baseline estimate of existing riparian habitat and functions.

### Impact/Study Area

Upland area of the project site.

### Mitigations

- a. The upland facility will be designed to minimize, avoid, and reduce impacts to the baseline habitats and functions.
- b. A mitigation plan will be developed and included in the facility design to replace the baseline habitats and functions that are unavoidably impacted, including compensation for temporal loss of function if needed.
- c. Construction BMPs to protect the baseline habitats and functions will be developed during the design phase.
- e. A post construction monitoring plan will be developed for a keystone habitat attribute and fish species.

#### References

- a. WAC 220-110
- b. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- c. WDFW Stream Habitat Restoration Guidelines, 2012.
- c. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

#### 2. Wetlands

### Impact Statement

WDFW is concerned that the proposed upland facility will impact existing wetlands at the project site.

### Studies Needed

Wetland Determination and Delineation.

### Impact/Study Area

Upland area of the project site.

#### **Mitigations**

- a. The upland facility will be designed to minimize, avoid, and reduce impacts to the baseline wetland habitats and functions.
- b. A mitigation plan will be developed to replace the baseline wetland habitats and functions that are unavoidably impacted.
- c. Wetlands and Habitat Mitigation Plan required in the Settlement Agreement Pacific International Terminals Shoreline Substantial Permit (SA) 2.1, Appendix A
- d. The upland facility design will included the mitigations necessary to replace the baseline wetland habitats and functions that are unavoidably impacted.
- e. Construction BMPs to protect the wetland habitats and functions will be developed during the design phase.
- f. A post construction monitoring plan will be developed for a representative onsite wetland.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Preliminary Conceptual Compensatory Mitigation Plan, PIT, 2011
- c. Wetland Determination and Delineation Gateway Pacific Terminal Property Whatcom County, WA. 2008. AMEC Earth & Environmental, Inc.
- d. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- e. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### 3. Wildlife

### **Impact Statement**

WDFW is concerned that the proposed upland facility has the potential to adversely affect habitats or species considered by WDFW to be priority habitats and species (PHS), which may be present within the terrestrial environment of the proposed facility.

#### Studies Needed

The terrestrial environment within the proposed project site should be surveyed for the presence of WDFW PHS. Surveys should include an inventory of all PHS present on the proposed project site and should, at a minimum, include population numbers, distribution, and (as applicable) an account of life history stages and/or seasons in which priority species are present.

### Impact/Study Area

The study area should encompass the entire terrestrial environment where the proposed upland facility is to be constructed.

### Mitigations

- a. Design upland facility to minimize impacts to Priority Habitats and Species within the study area.
- b. Incorporate noise abatement, coal dust management, pollution control, stormwater management and spill response planning into the design of the upland facility.

#### References

- a. WDFW Priority Habitats and Species List.
- b. WDFW Management Recommendations for Washington's Priority Habitats.
- c. WDFW Management Recommendations for Washington's Priority Species.

#### 4. Fish

### Impact Statement

WDFW is concerned that the proposed upland facility will impact fish species that may be present in the streams at the project site.

### Studies Needed

a. Monthly fish sampling in project site streams for a one year period.

b. Conduct a stream habitat assessment for each stream at the project site.

### Impact/Study Area

Streams within the upland area of the project site.

### Mitigations

- a. The upland facility will be designed to minimize, avoid, and reduce impacts to the baseline stream habitats and functions.
- b. A mitigation plan will be developed to replace the baseline stream habitats and functions beneficial to fish life that are unavoidably impacted including riparian corridor functions.
- c. The upland facility design will included the mitigations necessary to replace the baseline stream habitats and functions beneficial to fish life that are unavoidably impacted.
- d. Construction BMPs to protect fish life will be developed during the design phase if necessary.
- e. A contingency mitigation plan will be developed during the design phase to compensate for mitigation actions that do not perform satisfactorily, as defined during the design phase.

#### References

- a. WAC 220-110
- b. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- c. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.
- d. WDFW Stream Habitat Guidelines, Chapter 3, 2012.
- e. WDFW Stream Habitat Restoration Guidelines, 2012.

### 5. Coal Dust

#### **Impact Statement**

WDFW is concerned that the coal dust generated during the transfer and storage operations at the upland facility will impact habitats and functions of the existing streams and wetlands at the project site.

#### Studies Needed

Review of literature documenting successful coal dust management strategies.

#### Impact/Study Area

Upland area of the project site.

#### Mitigations

- a. The upland facility will be designed to minimize coal dust escaping the transfer and storage areas.
- b. BMPs for managing coal dust at the upland facility will be identified during the design phase.

- c. A post construction monitoring plan will be developed to measure the deposition of coal dust at increasing distances from the coal storage and transfer area.
- d. A contingency mitigation plan will be developed during the design phase to compensate for mitigation actions that do not perform satisfactorily, as defined during the design phase.

#### References

a. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.

#### 6. Noise

### Impact Statement

WDFW is concerned that the noise from proposed upland facility will impact Priority Habitats and Species (PHS) that may be present at the project site.

### Studies Needed

Review of literature documenting successful noise reduction strategies for upland bulk commodity transfer facilities.

### Impact/Study Area

Upland area of the project site.

### Mitigations

- a. The upland facility will be designed to minimize noise from the transfer and storage areas.
- b. BMPs for managing noise at the upland facility will be developed during the design phase.

#### References

a. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.

b. WDFW 2011 Unpublished Comments – PIT Project Information Document, 2011.

#### 7. Stormwater

### Impact Statement

WDFW is concerned that the stormwater runoff from the constructed facility will impact the wetland, streams and marine environment at and in the vicinity of the project site.

#### Studies Needed

None

#### Impact/Study Area

Upland area of the proposed project site.

### Mitigations

a. A Stormwater Management Plan will be developed in accordance with Whatcom County Standards, DOE Stormwater Guidelines, and Appendix F of the Settlement Agreement (SA 2.8.c) during the design phase.

- b. The upland facility will be designed to include the stormwater management elements identified in the Stormwater Management Plan.
- c. Construction BMPs to manage stormwater will be developed during the design phase.
- d. A post construction monitoring plan will be developed to measure compliance with stormwater requirements.
- e. A contingency plan will be developed during the design phase to compensate for stormwater management elements that do not perform satisfactorily, as defined during the design phase.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Whatcom County Development Standards.
- c. Washington State Department of Ecology Stormwater Guidelines.

### UPLAND FACILITY CONSTRUCTION

#### 1. Streams

**Impact Statement** 

WDFW is concerned that construction of the proposed upland facility will impact the existing riparian habitat, stream habitat and stream hydrology at the project site.

#### Studies Needed

None.

Impact/Study Area

Upland area of the project site.

### Mitigations

- a. Implement construction BMPs developed during design phase.WAC 220-110.
- b. Implement the mitigations necessary to replace the baseline habitats and functions that are unavoidably impacted.

#### References

- a. RCW 77.55.021
- b. WAC 220-110
- c. Project Information Document Gateway Pacific Terminal Whatcom County,

Washington. 2011. Pacific International Terminals, Inc.

- d. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.
- e. WDFW Stream Habitat Restoration Guidelines, 2012.

#### 2. Wetlands

Impact Statement

WDFW is concerned that construction activities associated with the proposed upland facility will impact the existing wetland habitats at the project site.

Studies Needed

None.

### Impact/Study Area

Upland area of the project site.

### Mitigations

- a. Implement requirements of the Wetlands and Habitat Mitigation Plan developed during the design phase. SA Section 2.1, Appendix A.
- b. Implement construction BMPs developed during design phase to protect wetland habitats and functions.
- c. Implement the mitigations necessary to replace the baseline wetland habitats and functions that are unavoidably impacted.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23
- b. Preliminary Conceptual Compensatory Mitigation Plan, PIT, 2011
- c. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- d. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

#### 3. Wildlife

### Impact Statement

WDFW is concerned that the construction of the proposed upland facility has the potential to disturb or displace Priority Habitats and Species, which may be present within the terrestrial environment of the proposed facility.

#### Studies Needed

None

#### Impact/Study Area

The study area should encompass the terrestrial environment where the proposed upland facility is to be constructed and include areas impacted during facility construction. This should include layout and staging areas, and areas adjacent to the construction site that will be affected by noise, vibrations, runoff, or other potential "off-site" impacts potentially affected during project construction.

### Mitigations

- a. Implement BMPs that reduce and minimize the potential disturbance or displacement of Priority Habitats and Species.
- b. Optimize project timing and construction sequencing, minimize staging area footprint, and utilize standard construction best management practice to reduce, minimize or avoid impacts to Priority Habitats and Species.

### References

- a. WDFW Priority Habitats and Species List
- b. WDFW Management Recommendations for Washington's Priority Habitats

c. WDFW Management Recommendations for Washington's Priority Species

#### 4. Fish

#### **Impact Statement**

WDFW is concerned that the construction activities associated with the proposed upland facility will impact fish species that may be present in the streams at the project site.

### Studies Needed

None.

### Impact/Study Area

Streams at the upland area of the project site.

### Mitigations

- a. Implement construction BMPs developed during design phase. WAC 220-110.
- b. Implement the mitigations necessary to replace the baseline habitats and functions that are unavoidably impacted.

#### References

- a. RCW 77.55.021
- b. WAC 220-110
- c. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- d. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.
- e. WDFW Stream Habitat Restoration Guidelines, 2012.

#### 5. Noise

### Impact Statement

WDFW is concerned that the noise of the construction activities associated with the upland facility will impact keystone PHS species that may be present at the project site.

### Studies Needed

None.

### Impact/Study Area

Upland area of the project site.

### Mitigations

- a. Implement construction BMPs developed during design phase to reduce noise related impacts to keystone PHS habitats and species at the project site.
- b. Construct the upland facility features designed to minimize noise from the operation of the transfer and storage areas.

#### References

a. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.

#### 6. Stormwater

### **Impact Statement**

WDFW is concerned that the stormwater runoff during the construction of the upland facility will impact the wetland, streams and marine environment at and in the vicinity of the project site.

#### Studies Needed

None

### Impact/Study Area

Upland area of the proposed project site.

### Mitigations

- a. Construct the upland facility features designed to manage stormwater from the upland site.
- b. Implement the construction BMPs identified in the design phase to manage stormwater during the construction phase.

#### References

a. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.

### **UPLAND FACILITY OPERATION**

#### 1. Streams

#### **Impact Statement**

WDFW is concerned that operation of the proposed upland facility will impact the existing streams and stream hydrology at the project site.

#### Studies Needed

None.

### Impact/Study Area

Upland area of the project site.

### Mitigations

- a. Implement the monitoring plan for a keystone stream habitat attribute developed during design phase.
- c. Monitoring the mitigations constructed to replace the baseline habitats and functions that are unavoidably impacted.
- b. Implement the contingency elements of the monitoring plan as required.

#### References

None.

#### 2. Wetlands

### Impact Statement

WDFW is concerned that operation of the proposed upland facility will impact the existing wetland habitats at the project site.

#### Studies Needed

None.

### Impact/Study Area

Upland area of the project site.

### Mitigations

- a. Implement the requirements of the Wetlands and Habitat Mitigation Plan developed during the design phase. SA Section 2.1, Appendix A.
- b. Monitor the mitigations constructed to replace the baseline habitats and functions that are unavoidably impacted.
- d. Implement the contingency elements of the monitoring plan as required.
- e. Implement the monitoring plan for a keystone stream habitat attribute developed during design phase.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23
- b. Preliminary Conceptual Compensatory Mitigation Plan, PIT, 2011

#### 3. Wildlife

### Impact Statement

WDFW is concerned that the operation of the proposed upland facility has the potential to adversely affect habitats or species considered by WDFW to be "Priority Habitats and Species", which may be present within the terrestrial environment of the proposed facility.

#### Studies Needed

Long-term monitoring (see mitigations below).

#### Impact/Study Area

The study area should encompass the terrestrial environment where upland facility operations are to be conducted and areas adjacent to the proposed facility that could be affected by noise, vibrations, runoff, or other potential "off-site" impacts associated with facility operation.

### Mitigations

- a. Conduct post-construction monitoring of Priority Habitats and Species within study area.
- b. Implement noise abatement, coal dust management, pollution control, stormwater management and spill response plans that minimize impacts to Priority Habitats and Species present at the upland area of the project site.

#### References

- a. WDFW Priority Habitats and Species List
- b. WDFW Management Recommendations for Washington's Priority Habitats
- c. WDFW Management Recommendations for Washington's Priority Species

#### 4. Fish

### Impact Statement

WDFW is concerned that the operations of the proposed upland facility will impact fish species that may be present in the streams at the project site.

#### Studies Needed

None.

### Impact/Study Area

Streams at the upland area of the project site.

### Mitigations

- a. Monitor the mitigations constructed to replace the baseline stream habitats and functions beneficial to fish life that are unavoidably impacted.
- b. Implement the contingency elements of the monitoring plan as required.

#### References

None.

#### 5. Coal Dust

### **Impact Statement**

WDFW is concerned that the coal dust generated during the transfer and storage operations at the upland facility will impact habitats and functions of the existing streams and wetlands at the project site.

#### Studies Needed

None.

### Impact/Study Area

Upland area of the project site.

### Mitigations

- a. Implement the BMPs for managing coal dust at the upland facility that were identified during the design phase.
- b. Implement the post construction monitoring plan for coal dust that was developed during the design phase.
- c. Implement the contingency elements of the monitoring plan as required.

#### References

None.

#### 6. Noise

#### Impact Statement

WDFW is concerned that the noise from the operation of the proposed upland facility will impact Priority Habitats and Species (PHS) that may be present at the project site.

#### Studies Needed

None.

Impact/Study Area

Upland area of the project site.

### Mitigations

a. Implement the BMPs for managing noise at the upland facility developed during the design phase.

#### References

None.

#### 7. Stormwater

### Impact Statement

WDFW is concerned that the stormwater runoff from the constructed facility will impact the wetland, streams and marine environment at and in the vicinity of the project site.

#### Studies Needed

None

#### Impact/Study Area

Upland area of the proposed project site.

### Mitigations

- a. Implement the Stormwater Management Plan developed in accordance with Whatcom County Standards, DOE Stormwater Guidelines, and Appendix F of the Settlement Agreement (SA 2.8.c) during the design phase.
- b. Implement the post construction monitoring plan developed during the design phase to measure compliance with local and state stormwater requirements.
- c. Implement the contingency elements of the monitoring plan as required.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Whatcom County Development Standards
- c. Washington State Department of Ecology Stormwater Guidelines

### MARINE FACILITY

### MARINE TRESTLE/WHARF DESIGN

### 1. Marine Vegetation - Shading

#### **Impact Statement**

WDFW is concerned that the shadow cast by the proposed trestle/conveyor structure will potentially impact marine vegetation at the project site including eelgrass and macro algae species.

### Studies Needed

- a. Update the trestle/conveyor design to avoid marine vegetation impacts. SA 2.6a
- b. Evaluate the shadow for the updated trestle/conveyor design.

- c. Baseline Survey Immediately update the marine vegetation survey consistent with WDFW's Marine Vegetation Survey Protocols for the purpose of impact assessment.
- d. Baseline Survey Update the marine vegetation distribution in relation to the final trestle design within 2 years of initiating trestle construction activities. SA 2.6.b
- e. Post Construction Monitoring Plan SA 2.2.b.2, Appendix B SA

The impact area for the shadow cast by the proposed trestle/conveyor structure needs to include the composite shadow footprint of the trestle for March 21, June 21 and September 21.

### Mitigations

- a. Deck Grating Trestle design will incorporate grating or other light transmission structures along sections of the trestle roadway surface from OHW to -25 (MLLW = 0.00). SA 2.6.d
- b. Trestle Alignment Trestle aligned to avoid potential shading of eelgrass and reduce potential shading of macro algae species. SA 2.6.a
- c. Trestle Height and Piling Configuration The height and piling configuration of the trestle structure designed to enhance light refraction and diffusion under and around the structure and in particular in the marine vegetation zone between OHW and -25 (MLLW=0.00). SA 2.6.c
- d. Trestle Reflective Paint Commercially available light reflective coating on underside of the trestle in macroalgae zone. SA 2.6.f
- e. Macro Algae Mitigation
  - 1. Phase 1 Mitigation Site identified and constructed prior trestle construction SA 2.2.b.1, Appendix B.
  - 2. Phase 2 Site Identification SA 2.2.b.1, Appendix B.
  - 3. Mitigation Site Monitoring Plan SA 2.2.b.2, Appendix B.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. WDFW's Eelgrass/Macroalgae Habitat Interim Survey Guidelines 2008
- c. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- d. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

#### 2. Juvenile Salmon

Impact Statement

WDFW is concerned that the shadow cast by the proposed trestle structure will potentially disrupt the marine nearshore migration of juvenile salmonids.

Studies Needed

- a. Document monthly juvenile salmon presence in the marine intertidal and shallow subtidal areas of the project site for a period of one year.
- b. Regional Risk Assessment. SA 5.c, Appendix L

The marine intertidal and sub-tidal bedland area leased by PIT from DNR for the proposed PIT marine terminal.

### Mitigations

- a. Deck Grating Trestle design will incorporate grating or other light transmission structures along sections of the trestle roadway surface from OHW to -25 (MLLW=0.00). SA 2.6.d
- b. Trestle Alignment Trestle aligned north-south to maximize sunlight penetration under the proposed trestle structure.
- c. Trestle Height and Piling Configuration The height and piling configuration of the trestle structure designed to enhance light refraction and diffusion under and around the structure. SA 2.6.c
- d. Trestle Reflective Paint Commercially available light reflective coating on underside of the trestle in macroalgae zone. SA 2.6.f

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- c. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### 3. Herring

#### **Impact Statements**

- a. General Impact Statement WDFW is concerned that the proposed trestle/wharf structures will disrupt the near shore movement, schooling and spawning of the Cherry Point herring stock in the immediate vicinity of the proposed PIT port facility.
- b. Wharf Alignment Impact Statement WDFW is concerned that the presence and operation of the trestle/wharf structure in the preferred onshore migration corridor will disrupt pre-spawner staging behavior and onshore migration behavior of the Cherry Point herring stock.
- c. Wharf Lighting Impact Statement WDFW is concerned that the trestle and wharf lighting will disrupt the pre-spawner staging behavior and onshore migration behavior of the Cherry Point herring stock.

### Studies Needed

a. Herring Monitoring Program – SA 2.3.a, Appendix C.

- b. Implement Herring Monitoring Program Pre construction and post construction herring monitoring SA 2.3.b, Appendix C.
- c. Monitoring Results Draft monitoring reports will be distributed to State Agencies and WEC no later than 90 day after each season's monitoring SA 2.3.c, Appendix C.
- d. Update trestle design to avoid impacts to herring dispersion. SA 2.6a
- e. Regional Herring Studies. SA 5b, Appendix L
- f. Regional Risk Assessment. SA 5.c, Appendix L
- g. Evaluate two (2) alternative trestle/wharf configurations that minimize the footprint of the trestle/wharf within the preferred herring onshore migration corridor.
  - 1. Modified T Wharf 1000' further south of existing location.
  - 2. L Configuration Wharf completely south of existing trestle location.

Impact/study area includes the marine inter-tidal and sub-tidal areas within 500 meters in all directions of the trestle/wharf structures.

### Mitigations

- a. Trestle Alignment The trestle/wharf needs to be designed to minimize potential impacts to herring dispersion into the nearshore spawning area by avoiding the preferred onshore migration corridor. SA 2.6.a.
- b. Herring Contingency Measures SA 2.3.d, Appendix C
- c. Herring Additional Mitigation SA 2.3.e, Appendix C.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. WDFW PIT Herring Summary 3-12-08 (M. O'Toole).
- c. PIT Meeting WDFW Power Point Presentation 3-12-08(M. O'Toole).
- d. WDFW Cherry Point Nearshore Herring Migration Corridor Figure (4-15-11 (M. Otoole).
- e. PIT Discussion on Alternative Berth Layout 1-14-11 (Ausenco Sandwell for PIT/PIT).
- f. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- g. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

#### 4. Sediment and Water Quality

#### Impact Statement

WDFW is concerned that the upland and trestle/wharf facilities will degrade the marine water and sediment quality in the vicinity of the proposed terminal.

#### Studies Needed

Baseline data for sediments, marine water and shellfish and/or other indicator species. Impact/Study Area

The intertidal and sub-tidal bedland area leased by PIT from DNR for the proposed marine terminal.

### Mitigations

- a. PIT will fund annual sampling of sediments, marine water and shellfish and/or other indicator species per state protocols. SA 2.5
- b. PIT will develop a plan for sediment, marine biota and water quality sampling and monitoring. SA 2.5, Appendix E
- c. PIT will prepare an Incident Response Plan prior to construction. SA 2.9.a

#### References

Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

#### 5. Stormwater

### Statement of Potential Impact

WDFW is concerned that the stormwater runoff from the trestle/wharf will impact the quality of the sediments, biota and water quality in the marine environment at the project site and vicinity.

#### Studies Needed

PIT will develop a Stormwater Management Plan for the proposed trestle/wharf structures in accordance to Whatcom County standards and DOE guidelines and Appendix F of the SA. SA2.8.c, Appendix F

### Impact/Study Area

The extent of the marine bed land leased to PIT by DNR for the marine element of the proposed facility.

### Mitigations

Stormwater requirements and objectives for the trestle/wharf structures specified in Appendix F of the Settlement Agreement. SA Appendix F.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Whatcom County Stormwater Standards.
- c. Department of Ecology Stormwater Guidelines.

#### 6. Materials Handling - Conveyor Containment

### Impact Statement

WDFW is concerned that the raw materials transferred across the trestle/wharf will be introduced into the marine environment.

#### Studies Needed

None.

Impact/Study Area

The extent of the marine bed land leased to PIT by DNR for the marine element of the proposed facility.

### Mitigations

Conveyor system designed to be totally enclosed within a gallery. SA 2.6.e

#### References

Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

### 7. Littoral Drift - Wave Dampening

### Impact Statement

WDFW is concerned that the proposed trestle/wharf structure will dampen the existing wave conditions at the site and impact existing littoral drift dynamics of the Cherry Point shoreline.

#### Studies Needed

A littoral drift and wave dampening analysis for the trestle/wharf structures and associated moored vessels.

### Impact/Study Area

The Cherry Point shoreline between Point Whitehorn and Sandy Point.

### Mitigations –

- a. Wave Analysis PIT will cooperate with State agencies and participate in a financially proportionate manner in a Cherry Point reach wide- monitoring study of wave dampening and littoral drift. SA 2.7a
- b. Trestle/Wharf Design PIT avoids wave damping and impacts to littoral drift by appropriate placement and operation of the trestle and wharf. SA 2.7.c
- c. Vessel Traffic Log PIT will maintain a log detailing each vessel that utilizes the wharf. SA 2.7.c

#### References

Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

#### 9. Wildlife

### Impact Statement

WDFW is concerned that the proposed trestle and wharf structures have the potential to adversely affect habitats or species considered by WDFW to be "Priority Habitats and Species", which may be present within the marine environment of the proposed facility.

#### Studies Needed

The marine environment within the proposed project site should be surveyed for the presence of WDFW Priority Habitats and Species. Surveys should include an inventory of all Priority Habitats and Species present on the proposed project site and should, at a

minimum, include population numbers, distribution, and (as applicable) an account of life history stages and/or seasons in which priority species are present.

### Impact/Study Area

The study area should encompass the entire marine intertidal and sub-tidal area leased by PIT from DNR where the proposed trestle and wharf are to be constructed.

### Mitigations

Trestle Alignment – The trestle and wharf should be designed to avoid potential impacts to herring dispersion into the embayment by avoiding preferred onshore migration corridor. SA 2.6.a.

#### References

- a. WDFW Priority Habitats and Species List.
- b. WDFW Management Recommendations for Washington's Priority Habitats.
- c. WDFW Management Recommendations for Washington's Priority Species.

#### 10. Surf Smelt and Sand Lance

#### Impact Statement

WDFW is concerned that the proposed trestle/wharf structure will impact documented surf smelt and/or sand lance spawning and spawning habitat at the project site.

#### Studies Needed

Review WDFW's SalmonScape database to determine if surf smelt or sand lance spawn has been documented at the project site.

### Impact/Study Area

The marine intertidal area leased by PIT from DNR for the proposed marine terminal.

### Mitigations

Trestle alignment should avoid areas of the shoreline where WDFW has documented surf smelt or sand lance spawn.

#### References

- a. WDFW SalmonScape Data Base.
- b. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- c. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### MARINE TRESTLE/WHARF CONSTRUCTION

### 1. Marine Vegetation

### **Impact Statement**

WDFW is concerned that the construction tug/barge operations and pile driving activities associated with construction of the proposed trestle and wharf will impact the marine vegetation habitat at the project site.

#### Studies Needed

a. Baseline Survey – Update the marine vegetation survey within 2 years of initiating trestle construction activities. SA 2.6.b.

- b. Updated Monitoring Plan.
- c. Phase 1 and Phase 2 Macro Algae Mitigation Site Identification.
- d. Phase 1 Macro Algae Mitigation Successfully Implemented.

The study area boundary for evaluating the potential impact of the barge/tug operations and pile driving activities on marine vegetation will need to include the marine vegetation zone between the OHW to -25 (MLLW = 0.00) and the area on both sides of the trestle within 200 feet of the trestle centerline.

### Mitigations

- a. BMPs SA 2.8.a, WAC 220-110.
- b. Post Construction Monitoring Plan SA 2.2.b.2, Appendix B monitor impacts that may be associated with tugs and barges.
- c. Phase 1 Mitigation Site identified and constructed prior trestle construction SA 2.2.b.1, Appendix B.
- d. Phase 2 Site Identification SA 2.2.b.1, Appendix B.
- e. Mitigation Site Monitoring Plan SA 2.2.b.2, Appendix B.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. WAC 220-110.
- c. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- d. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### 2. Juvenile Salmon

#### **Impact Statement**

WDFW is concerned that the construction tug/barge operations and pile driving activities associated with construction of the proposed trestle and wharf will disrupt the marine nearshore migration and rearing of juvenile salmonids.

### Studies Needed

Document monthly juvenile salmon presence and timing in the marine intertidal and shallow sub-tidal areas of the project site for period of one year.

#### Impact/Study Area

The marine intertidal and sub-tidal bedland area leased by PIT from DNR for the proposed marine terminal.

### Mitigations

- a. Implement construction schedule developed during design phase–SA 2.8.d
- b. Construction Timing Restrictions WDFW will not permit work below the ordinary high water line from March 15 through June 15 of any year for the protection of migrating juvenile salmon.

c. WAC 220-110

#### References

- a. Chapter WAC 220-110
- b. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

#### 3. Herring

### **Impact Statement**

WDFW is concerned that the construction tug/barge operations and pile driving activities associated with construction of the proposed trestle and wharf will disrupt the near shore movement, schooling and spawning of the Cherry Point herring stock in the immediate vicinity of the project site during the herring spawning season.

#### Studies Needed

None.

### Impact/Study Area

Impact/study area includes the marine inter-tidal and sub-tidal areas within 500 meters in all directions of the trestle/wharf structures.

### Mitigations

- a. Construction Timing Restrictions WDFW will not permit work below the ordinary high water line from March 15 through June 30 of any year for the protection of spawning herring and herring spawn.
- b. Implement construction schedule developed during design phase—SA 2.8.d References
  - a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
  - b. WAC 220-110
  - c. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
  - d. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### 4. Piling

### Impact Statement

WDFW is concerned that the pile driving activities associated with construction of the proposed trestle and wharf will disrupt or harm migrating juvenile salmon.

#### Studies Needed

None.

#### Impact/Study Area

The marine intertidal and sub-tidal bedland area leased by PIT from DNR for the proposed marine terminal.

### Mitigations -

- a. BMPs, WAC 220-110.
- b. Piling will only be concrete, steel or recycled plastic. Minimize number of piles. SA 2.8.e.

#### References

- a. WAC 220-110.
- b. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- c. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- d. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### 5. Water Quality

**Impact Statement** 

WDFW is concerned that the quality of the marine water quality in the vicinity trestle/wharf structures will be impacted by the inadvertent release of fresh concrete and/or petroleum products during construction and fish/wildlife harmed as a result.

#### Studies Needed

None.

Impact/Study Area

The marine intertidal and sub-tidal bedland area leased by PIT from DNR for the proposed marine terminal.

### Mitigations

- a. PIT will implement the Incident Response Plan developed during the design phase of the project. SA 2.9.a
- b. PIT will acquire and maintain a rapid deployment heavy spill containment boom sufficient to circle the largest vessel plus 50% in order to provide an immediate spill response capability. SA 2.9.b
- c. BMPs, WAC 220-110.

#### References

- a. WAC 220-110.
- b. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

#### 6. Wildlife

**Impact Statement** 

WDFW is concerned that the construction of the proposed trestle and wharf structures has the potential to disturb or displace Priority Habitats and Species, which may be present within the marine environment of the proposed facility.

### Studies Needed

None.

The study area should encompass the marine intertidal and sub-tidal area leased by PIT from DNR for the proposed trestle and wharf, and include adjacent areas potentially impacted during trestle and wharf construction.

### Mitigations

Construction Timing Restrictions – WDFW will not permit work below the ordinary high water line from March 15 through June 30 of any year for the protection of spawning herring and herring spawn.

#### References

- a. WDFW Priority Habitats and Species List.
- b. WDFW Management Recommendations for Washington's Priority Habitats.
- c. WDFW Management Recommendations for Washington's Priority Species.
- d. WAC 220-110.

### MARINE TRESTLE/WHARF OPERATIONS

### 1. Herring Behavior

### **Impact Statement**

WDFW is concerned that the noise and artificial light associated with the operations of the proposed trestle and wharf will disrupt the herring prespawner staging and on shore migration of the Cherry Point herring stock in the immediate vicinity of the proposed project.

### Studies Needed

- a. Herring Monitoring Program SA 2.3.a.
- b. Implementation of Herring Monitoring Program SA 2.3.b.
- c. Draft Monitoring Reports SA 2.3.c.

#### Impact/Study Area

Impact/study area includes the marine inter-tidal and sub-tidal areas within 500 meters in all directions of the trestle/wharf structures.

### Mitigations

- a. Herring Monitoring Program Contingency Measures SA 2.3.d, Appendix C.
- b. Additional Herring Mitigation SA 2.3.e, Appendix C.
- c. PIT will operate conveyor systems to minimize noise. SA 2.9.c.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- c. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### 2. Sediment and Water Quality

### Impact Statement

WDFW is concerned that the operations of the upland and trestle/wharf facilities will degrade the marine water and sediment quality in the vicinity of the proposed terminal.

#### Studies Needed

Evaluation of existing baseline conditions of the sediments, marine water and shellfish and/or other indicator species at the project site.

### Impact/Study Area

The intertidal and sub tidal bedland area leased by PIT from DNR for the proposed marine terminal.

### Mitigations

- a. PIT will fund annual sampling of sediments, marine water and shellfish and/or other indicator species per state protocols.  $SA\ 2.5$
- b.PIT will implement the sampling and monitoring plan for sediment, marine biota and water quality. SA 2.5, Appendix E
- c. If pollution levels exceed the action levels set forth in Appendix E,
- d. PIT will implement all mitigation measures that State Agencies reasonably determine necessary to compensated for such impacts and avoid exceedances in the future. SA 2.5, Appendix E
- e. PIT will implement the Incident Response Plan developed during the design phase of the project. SA 2.9.a
- f. PIT will acquire and maintain a rapid deployment spill containment boom sufficient to circle the largest vessel plus 50% in order to provide an immediate spill response capability. SA 2.9.b

### References

a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

#### 3. Stormwater

### Statement of Potential Impact

WDFW is concerned that the stormwater runoff from the operation of the trestle/wharf will impact the quality of the sediments, biota and water quality in the marine environment at the project site and vicinity.

### Studies Needed

PIT will conduct compliance monitoring for trestle/wharf structures consistent with the requirements specified in the Stormwater Management Plan that was developed during the design phase. SA 2.8.c, Appendix F.

### Impact/Study Area

The extent of the marine bed land leased to PIT by DNR for the marine element of the proposed facility.

### Mitigations

Implement the Stormwater Management Plan developed for the trestle/wharf structures that was developed during the design phase.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Whatcom County Stormwater Standards.
- c. Department of Ecology Stormwater Guidelines.

### 4. Wildlife

### Impact Statement

WDFW is concerned that the operation of the proposed trestle and wharf facility has the potential to adversely affect habitats or species considered by WDFW to be "Priority Habitats and Species", which may be present within the marine environment of the proposed facility.

#### Studies Needed

Long-term monitoring (see mitigations below).

### Impact/Study Area

The study area should encompass the marine intertidal and sub-tidal area leased by PIT from DNR for the proposed trestle and wharf, and include adjacent areas potentially impacted during trestle and wharf operations.

### Mitigations

- a. PIT will conduct post construction monitoring of select PHS species present in the immediate vicinity of the trestle/wharf structure.
- b. Implement noise abatement, coal dust management, pollution control, stormwater management and spill response plans that minimize impacts to PHS habitats and species present at the upland area of the project site.

#### References

- a. WDFW Priority Habitats and Species List.
- b. WDFW Management Recommendations for Washington's Priority Habitats.
- c. WDFW Management Recommendations for Washington's Priority Species.

### 5. Materials Handling - Conveyor Containment

#### **Impact Statement**

WDFW is concerned that materials transferred across the trestle/wharf will be introduced into the marine environment.

#### Studies Needed

None.

Impact/Study Area

The extent of the marine bed land leased to PIT by DNR for the marine element of the proposed facility.

### Mitigations

- a. BMPS implemented to maintain and operate conveyor systems to prevent the introduction of dust entering the marine environment during transfer operations. SA 2.9.c
- b. PIT will develop operating and safety protocols for each product, both storage and transfer prior to vessel use of the wharf. SA 2.9.d

#### References

a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

### 6. Littoral Drift - Wave Dampening

### **Impact Statement**

WDFW is concerned that the proposed trestle/wharf structure will dampen the existing wave conditions at the site and impact existing littoral drift dynamics.

#### Studies Needed

A littoral drift and wave dampening analysis for the trestle/wharf structures and associated moored vessels.

### Impact/Study Area

The Cherry Point shoreline between Point Whitehorn and Sandy Point.

### Mitigations

- a. Wave Analysis PIT will cooperate with State agencies and participate in a financially proportionate manner in a Cherry Point reach wide- monitoring study of wave dampening and littoral drift. SA 2.7a
- b. Trestle/Wharf Design PIT will avoid wave damping and impacts to littoral drift by appropriate placement and operation of the trestle and wharf. SA 2.7.c
- c. Vessel Traffic Log PIT will maintain a log detailing each vessel that utilizes the wharf. SA 2.7.c

#### References

a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

### **VESSEL (SHIP) OPERATIONS**

### 1. Vessel Traffic

### Impact Statement

WDFW is concerned that the vessel traffic associated with the proposed PIT Terminal increases the risk of the vessel collisions, powered and drift groundings, allusions, spills, routine discharges and other incidents that could harm natural resources. Studies Needed

- a. PIT will fund a Vessel Traffic Analysis. SA 2.10.a, Appendix G
- b. PIT will prepare a tidal current study in time for utilization and incorporation in the Vessel Traffic Analysis. SA 2.10.e

Deep draft waterways around the San Juan Islands south of 49 degree and north of and including the traffic convergence zone around buoy "RA" and including the Strait of Georgia, Boundary Pass, Haro Strait, and Rosario Strait. SA Appendix G

### Mitigations

- a. PIT will fund an Ecology appointed advisory marine safety committee that on the basis of the Vessel Traffic Analysis, recommends revised vessel operation protocols and other mitigation measures. SA 2.10.b
- b. PIT will immediately implement operation protocols and mitigation measures recommended by the advisory marine safety committee. SA 2.10.c
- c. Operation of GPT terminal will not commence until PIT implements the onsite operating protocols and mitigations measures recommended by the advisory marine safety committee. SA 2.10.d

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- c. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### 2. Vessel Fueling

**Impact Statement** 

WDFW is concerned that petroleum products will be introduced into the marine environment during fuel transfers between the wharf and moored vessels.

#### Studies Needed

None.

Impact/Study Area

All marine waters in the Strait of Georgia, San Juan County and Whatcom County. Mitigations

- a. PIT agrees to not allow bunkering by vehicle or other fuel transfers of over 1000 gallons to vessels using the wharf or terminal, except in emergency situations authorized by DOE. SA 2.9.a
- b. For fuel transfers of 1000 gallons or less, PIT will send DOE prior notice. DOE reserves right to limit or prohibit any and all fuel transfers. SA 2.9.a

### References

a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

### 3. Oil Spill Response

### Impact Statement

WDFW is concerned that petroleum products and other hazardous materials will be introduced into the marine environment during fuel transfers between the wharf and moored vessels or as a result of vessel collisions, powered and drift groundings, allusions, spills, routine discharges and other incidents

#### Studies Needed

None.

### Impact/Study Area

All marine waters in the Salish Sea and Strait of Juan de Fuca.

### Mitigations

- a. PIT will implement the Incident Response Plan developed during the design phase of the project. SA 2.9.a
- b. PIT will acquire and maintain a rapid deployment spill containment boom sufficient to circle the largest vessel plus 50% in order to provide an immediate spill response capability. SA 2.9.b

#### Reference

a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

### 4. Vessel Berthing Operations

### **Impact Statement**

WDFW is concerned that vessel berthing operations at the proposed wharf structure during the herring spawning season will disrupt pre-spawner herring staging and onshore migration behavior in the preferred onshore herring migration corridor.

### Studies Needed

- a. Herring Monitoring Program SA 2.3.a.
- b. Implementation of Herring Monitoring Program SA 2.3.b.
- c. Draft Monitoring Reports SA 2.3.c.
- d. PIT will hire a marine engineering consultant to review the report developed by oil terminal operators in San Francisco at the request of the California Lands Commission relating to vessel mooring standards. SA 2.11.a

### Impact/Study Area

Impact/study area includes the marine inter-tidal and sub-tidal areas within 500 meters in all directions of the trestle/wharf structures.

### Mitigations

- a. Herring Monitoring Program Contingency Measures SA 2.3.d, Appendix C.
- b. Additional Herring Mitigation SA 2.3.e, Appendix C.
- c. No vessel will be moored or operated landward of the -25 tide elevation (MLLW = 0.00). SA 2.9.e

- d. PIT will hire a marine engineering consultant to prepare a draft report establishing safe vessel mooring standards, configurations and procedures for the PIT wharf. SA 2.11.b
- e. The draft report establishing safe vessel mooring standards, configurations and procedures for the GPT wharf will be submitted to DOE for approval. SA 2.11.b
- f. PIT agrees to fully implement the standards and procedures contained in the final approved safe vessel mooring standards, configurations and procedures report. SA 2.11.b

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. Project Information Document Gateway Pacific Terminal Whatcom County, Washington. 2011. Pacific International Terminals, Inc.
- c. WDFW 2011 Unpublished Comments PIT Project Information Document, 2011.

### 5. Vessel Operations While Berthed

### Impact Statement

WDFW is concerned that noise from vessel operations while berthed at the proposed wharf structure will disrupt pre-spawner herring staging and onshore migration behavior in the preferred onshore herring migration corridor.

#### Studies Needed

- a. Herring Monitoring Program SA 2.3.a.
- b. Implementation of Herring Monitoring Program SA 2.3.b.
- c. Draft Monitoring Reports SA 2.3.c.

### Impact/Study Area

The extent of the marine bed land leased to PIT by DNR for the marine element of the proposed facility.

#### **Mitigations**

- a. Herring Monitoring Program Contingency Measures SA 2.3.d, Appendix C.
- b. Additional Herring Mitigation SA 2.3.e, Appendix C.
- c. PIT will operate conveyor systems to minimize noise. SA 2.9.c.

#### References

a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.

### 6. Vessel Operations – Marine Wildlife

### Impact Statement

WDFW is concerned that the vessel traffic associated with the proposed PIT facility has the potential to disrupt or harm Priority Habitats and Species present in the marine environment.

#### Studies Needed

The marine environment associated with deep draft shipping waterways used by vessels going to and from the proposed PIT terminal should be surveyed for the presence of WDFW Priority Habitats and Species. Surveys should include an inventory of all Priority Habitats and Species present on the proposed project site and should, at a minimum, include population numbers, distribution, and (as applicable) an account of life history stages and/or seasons in which priority species are present.

### Impact/Study Area

The study area should encompass deep draft waterways around the San Juan Islands south of 49 degree and north of and including the traffic convergence zone around buoy "RA" and including the Strait of Georgia, Boundary Pass, Haro Strait, and Rosario Strait. SA Appendix G.

### Mitigations

- a. PIT will fund an Ecology appointed advisory marine safety committee that on the basis of the Vessel Traffic Analysis, recommends revised vessel operation protocols and other mitigation measures. SA 2.10.b
- b. PIT will immediately implement operation protocols and mitigation measures recommended by the advisory marine safety committee. SA 2.10.c
- c. Operation of GPT terminal will not commence until PIT implements the onsite operating protocols and mitigations measures recommended by the advisory marine safety committee. SA 2.10.d
- d. PIT will implement the Incident Response Plan developed during the design phase of the project. SA 2.9.a
- e. PIT will acquire and maintain a rapid deployment spill containment boom sufficient to circle the largest vessel plus 50% in order to provide an immediate spill response capability. SA 2.9.b
- f. Herring Monitoring Program Contingency Measures SA 2.3.d, Appendix C
- g. Additional Herring Mitigation SA 2.3.e, Appendix C
- h. PIT will operate conveyor systems to minimize noise. SA 2.9.c

#### References

- a. WDFW Priority Habitats and Species List
- b. WDFW Management Recommendations for Washington's Priority Habitats
- c. WDFW Management Recommendations for Washington's Priority Species

#### 7. Ballast Water

#### Impact Statement

WDFW is concerned about the GPT terminal will significantly increase the risk of aquatic invasive species carried in ballast water from coastal and foreign ports. The type of vessels likely to call at this proposed PIT terminal would be of higher risk due to their generally being bulk carriers, spot charter business, arriving without cargo, high volume of ballast water in the 10's of thousands of cubic meters that would be discharged per

visit, and that these type vessels will take the longest to convert from open sea exchange to ballast water treatment systems.

#### Studies Needed

Development of sampling and monitoring protocols to verify that proper exchange or treatment of ballast water has been performed by each vessel calling on PIT; Baseline and trend monitoring in local area for invasive species.

### Impact/Study Area

Direct impact to general Cherry Point area and potential impact to all of Puget Sound/Salish Sea.

### Mitigations

- a. PIT agrees to comply with the vessel ballast water monitoring and contingency system specified in Appendix D of the Settlement Agreement. SA 2.4, Appendix D.
- b. Vessel ballast water inspections, sampling, and monitoring at a rate commensurate with concern; PIT agrees to follow "Studies Needed" conditions.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. DRAFT BALLAST WATER LANGUAGE, JOK 7-7-11; Incomplete Working Draft.
- c. State Laws and Rules (RCW, WACS): WDFW ballast water regulations at Chapter 220-150 WAC, applicable statutory provisions at Chapter 77.120 RCW.

### 8. Hull Fouling

### Impact Statement

WDFW is concerned about the PIT proposal as it could significantly increase the risk of aquatic invasive species carried on, or removed from, vessel hulls voyaging from coastal and foreign ports. The type of vessels likely to call at this proposed PIT terminal would be of higher risk due to their generally being spot charter business, very large bulk carriers with significant surface areas under water, new developments in hull coating regulations reducing the use of more effective toxic anti-fouling paints, and need for more frequent in-water cleaning to improve fuel efficiency.

#### Studies Needed

Vessel hull maintenance inspections/monitoring, sampling, and monitoring at a rate commensurate with concern. Baseline and trend monitoring in local area for invasive species.

### Impact/Study Area

Direct impact to the general Cherry Point area and potential impact to all of Puget Sound/Salish Sea.

### Mitigations

In-water hull or niche cleaning not allowed in terminal or larger area based on level of concern, unless otherwise approved by all the parties; PIT agrees to comply with state

current and future bio-fouling management laws and rules; PIT agrees to follow "Studies Needed" conditions.

#### References

- a. Settlement Agreement Pacific International Terminals Shoreline Substantial Permit SHS 92-0020 and SHB Appeals Numbers 97-22 and 97-23.
- b. DRAFT BALLAST WATER LANGUAGE, JOK 7-7-11; Incomplete Working Draft.
- c. State Laws and Rules: Unlawful use of prohibited aquatic animal species under RCW 77.15.253.

### **BURLINGTON NORTHER SANTE FE RAILROAD**

### INFRASTRUCTURE DESIGN

### Impact Statement

WDFW is concerned that the design of the infrastructure improvements and new infrastructure along the BNSF rail corridors necessary to support the number of trains, train lengths and train weights required to transport coal from Wyoming to the Gateway Pacific Terminal at Cherry Point will have significant potential impacts to Priority Habitats and Species (PHS) that may be present in proximity to the rail line routes.

#### Studies Needed

- a. Identify all infrastructure improvements and new construction along BNSF routes between Wyoming and Cherry Point.
- b. Inventory the keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.
- c. Indentify potential impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.
- d. Wildlife For all "sensitive wildlife species", evaluate the impacts associated with increased rail traffic associated with the project (with particular attention to wildlife collisions, disruption of migration and dispersal corridors), impacts related to noise, and effects of coal dust within and adjacent to potential routes. Mitigation sequencing should include an evaluation of each route and the comprehensive wildlife impacts of each, measures BNSF could implement to minimize those impacts, and specific mitigation strategies to offset unavoidable impacts of the selected route.

### Impact/Study Area

The study area should encompass all of the potential BNSF routes under consideration for transport of coal from the source of origin in Wyoming to the proposed Gateway Pacific Terminal at Cherry Point. Additionally, potential impacts not confined to these rail corridors or the easements/right of ways associated with those corridors (e.g. noise, coal dust) should be considered for their potential to adversely affect Priority Habitats

and Species (within Washington) and other sensitive wildlife species (outside of Washington).

### Mitigations

- a. Mitigation sequencing should, at a minimum, include an evaluation of each route and the comprehensive wildlife impacts of each, measures BNSF could implement to minimize those impacts, and specific mitigation strategies to offset unavoidable impacts of the selected route.
- d. Develop construction, maintenance and operation BMPs to avoid, minimize and reduce impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.
- b. Develop a mitigation plan for the unavoidable impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.
- c. Develop a monitoring strategy for mitigations of unavoidable impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.
- d. Develop a contingency plan for mitigations of unavoidable impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.

#### References

WAC 220-110.

### INFRASTRUCTURE CONSTRUCTION AND OPERATION

### Impact Statement

WDFW is concerned that the construction and operation of infrastructure improvements and new infrastructure along the BNSF rail corridors necessary to support the number of trains, train lengths and train weights required to transport coal from Wyoming to the Gateway Pacific Terminal at Cherry Point will have significant potential impacts to Priority Habitats and Species (PHS) that may be present in proximity to the rail line routes.

Studies Needed

None.

Impact/Study Area

All of the BNSF routes between Wyoming and Cherry Point.

#### Mitigations

a. Implement construction BMPs developed in the design phase to avoid, minimize and reduce impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.

- b. Implement the mitigation plans for the unavoidable impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.
- c. Implement the monitoring strategy for mitigations of unavoidable impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.
- d. Implement the contingency plans for mitigations of unavoidable impacts to keystone PHS habitats and species in proximity to each infrastructure improvement and new construction along BNSF routes between Wyoming and Cherry Point.

#### References

WAC 220-110

### **CLIMATE CHANGE**

### **GATEWAY PACIFIC TERMINAL**

### Impact Statement

WDFW is concerned that the combustion of the 48 million metric tons of coal annually exported by the Gateway Pacific Terminal at Cherry Point will significantly contribute to global climate changes that will result in potentially catastrophic and irreversible impacts to natural resources on the West Coast United States and Washington State. WDFW is particularly concerned that this combustion will exacerbate ocean acidification, sea level rise, warming stream temperatures, decreases in snow pack and increases in extreme weather events, and could potentially result in devastating impacts to fish, wildlife and their habitats in Washington State.

#### Studies Needed

Evaluate alternatives to producing the energy equivalent of 48 million metric tons of coal which will have less environmental impact.

### Impact/Study Area

Global

#### Mitigations

To offset the potential significant contribution to global climate change associated with the combustion of the exported coal, the owners of the coal mines and/or PIT should pay a carbon tax for each ton of coal exported commensurate with the potential contribution of the coal combustion to global warming.

### References

a. **The Washington Climate Change Impacts Assessment,** Climate Impacts Group 2009. The Washington Climate Change Impacts Assessment. M. McGuire Elsner, J. Littell, and L. Whitely Binder (eds). Center for Science in the Earth System, Joint Institute for the Study of the Atmosphere and Oceans, University of Washington, Seattle, Washington.

b. Scientific Summary of Ocean Acidification in Washington State Marine Waters, Washington State Blue Ribbon Panel on Ocean Acidification, November, 2012.

c. Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future, Committee on Sea Level Rise in California, Oregon, and Washington; Board on Earth Sciences and Resources; Ocean Studies Board; Division on Earth and Life Studies; National Research Council, 2012.

### MULTIPLE WEST COAST SHIPPING TERMINALS

### **Impact Statement**

WDFW is concerned that the combustion of the coal exported by the multiple shipping terminals proposed for the west coast of the United States and Canada will dramatically contribute to global climate changes that will result in potentially catastrophic and irreversible impacts to the natural resources and natural habitats of the West Coast United States and Canada, and Washington State

#### Studies Needed

- a. Determine the total coal volume that could be exported annually by the multiple coal shipping terminals proposed for the west coast of the U.S. and Canada.
- b. Evaluate alternatives to coal which will have significantly less environmental impact. Impact/Study Area

Global

### Mitigations

To offset the potential significant contribution to global climate change associated with the combustion of the exported coal, the owners of the coal mines and/or PIT should pay a carbon tax for each ton of coal exported commensurate with the potential contribution of the coal combustion to global warming.

#### References

- a. Regional Highlights from **Global Climate Change Impacts in the United States**, United States Global Change Research Program, <a href="www.globalchange.gov/usimpacts">www.globalchange.gov/usimpacts</a>, 2009.
- b. Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future, Committee on Sea Level Rise in California, Oregon, and Washington; Board on Earth Sciences and Resources; Ocean Studies Board; Division on Earth and Life Studies; National Research Council, 2012.

### **CUMMULATIVE IMPACTS**

### WEST COAST SHIPPING TERMINALS

**Impact Statement** 

WDFW is concerned that potential natural resource impacts associated with the construction and expansion of multiple shipping terminals along the west coast (Oregon,

Washington, British Columbia) are not adequately addressed through the regulatory processes for each individual terminal.

#### Studies Needed

- a. Cumulative Impact Analysis for all of the new and expanded coal shipping terminals proposed for the west coast.
- b. Vessel Traffic Safety Study for the west coast.
- c. An evaluation of the impacts to climate change from burning the exported coal.

### Impact/Study Area

California, Oregon, Washington and British Columbia

### Mitigations

A mitigation, monitoring and contingency plan that addresses the unavoidable cumulative impacts to keystone PHS habitats and species on the west coast of the U.S. and Canada.

#### References

None

### BURLINGTON NORTHERN SANTE FE RAILROAD

#### **Impact Statement**

WDFW is concerned that the cumulative impacts of the train activity and rail infrastructure along BNSF rail line routes in Washington State that is necessary to support existing and proposed processing and shipping terminals for all commodities along the west coast of Oregon, Washington and British Columbia will have significant impacts to Priority Habitats and Species (PHS) and communities in proximity to the BNSF rail line routes.

### Studies Needed

- a. The maximum number of trains for all commodities (oil, bulk, and passenger) that can be supported by the existing rail route infrastructure between Wyoming and Cherry Point needs to be identified.
- b. The maximum number of trains for all commodities (oil, bulk, and passenger) that can be supported by the existing rail routes with planned improvements and new infrastructure between Wyoming and Cherry Point needs to be identified.
- c. The cumulative impacts to keystone PHS habitats and species in proximity to the BNSF rail line routes needs to be addressed.
- d. The cumulative impacts to local communities in proximity to the BNSF rail line routes needs to be addressed.

#### Mitigations

- a. A mitigation plan that addresses unavoidable cumulative impacts to keystone PHS habitats and species along west coast BNSF routes needs to be developed and implemented.
- b. A mitigation plan that addresses unavoidable impacts to local communities in proximity to the BNSF rail line routes needs to be developed and implemented.

### References

None.

If you have any questions, please call me at (360) 466-4345 X 250.

Sincerely,

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### **WDFW CONTRIBUTORS**

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